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63  
SEQUENCE LISTING

<110> Emil Israel Katz

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ANTIBODIES DIRECTED THEREAGAINST, AND METHODS, SYSTEMS AND KITS FOR  
GENERATING AND UTILIZING EACH

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<223> Computer generated synthetic peptide



<400> 158

Pro Gly Leu Asn Ala Ile Leu Gly Pro Thr Gly Gly Gly Lys  
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<210> 159

<211> 10

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 159

Ser Ser Leu Leu Asp Val Leu Ala Ala Arg  
1 5 10

<210> 160

<211> 1

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 160

Lys  
1

<210> 161

<211> 16

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

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<213> Artificial sequence

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&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 164

Glu	Asn	Leu	Gln	Phe	Ser	Ala	Ala	Leu	Arg
1				5					10

&lt;210&gt; 165

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 165

Leu	Ala	Thr	Thr	Met	Thr	Asn	His	Glu	Lys
1				5					10

&lt;210&gt; 166

&lt;211&gt; 3

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 166

Asn	Glu	Arg
1		

&lt;210&gt; 167

&lt;211&gt; 3

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

05964704904



&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 170

Val Gly Thr Gln Phe Ile Arg  
 1 5

&lt;210&gt; 171

&lt;211&gt; 7

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 171

Gly Val Ser Gly Gly Glu Arg  
 1 5

&lt;210&gt; 172

&lt;211&gt; 1

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 172

Lys  
 1

&lt;210&gt; 173

&lt;211&gt; 1

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

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<210> 176

<212> PRT

<220>

<400> 176

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$\langle 211 \rangle$  3

&lt;212&gt; PRT

 $\langle 220 \rangle$ 

<400> 177

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$\langle 211 \rangle$  10

<212> PRT

$\langle 220 \rangle$

<400> 178

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<210> 179

<211> 5

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 179

Tyr Ser Ile Phe Lys  
1 5

<210> 180

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 180

Leu Phe Asp Ser Leu Thr Leu Leu Ala Ser Gly Arg  
1 5 10

<210> 181

<211> 46

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 181

Leu Met Phe His Gly Pro Ala Gln Glu Ala Leu Gly Tyr Phe Glu Ser  
1 5 10 15

Ala Gly Tyr His Cys Glu Ala Tyr Asn Asn Pro Ala Asp Phe Phe Leu  
20 25 30

FOR THE 2/2/2000



Asp Ile Ile Asn Gly Asp Ser Thr Ala Val Ala Leu Asn Arg  
 35 40 45

<210> 182

<211> 5

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 182

Glu Glu Asp Phe Lys  
 1 5

<210> 183

<211> 9

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 183

Ala Thr Glu Ile Ile Glu Pro Ser Lys  
 1 5

<210> 184

<211> 3

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

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<400> 184

Gln Asp Lys  
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<210> 185

<211> 5

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 185

Pro Leu Ile Glu Lys  
1 5

<210> 186

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 186

Leu Ala Glu Ile Tyr Val Asn Ser Ser Phe Tyr Lys  
1 5 10

<210> 187

<211> 3

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

FOR THE 2/23/50

<223> Computer generated synthetic peptide



&lt;400&gt; 193

Glu Ile Ser Tyr Thr Thr Ser Phe Cys His Gln Leu Arg  
 1 5 10

&lt;210&gt; 194

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 194

Trp Val Ser Lys  
 1

&lt;210&gt; 195

&lt;211&gt; 1

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 195

Arg  
 1

&lt;210&gt; 196

&lt;211&gt; 3

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

TESEF 24120500

<400> 196

Ser Phe Lys  
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<210> 197

<211> 31

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 197

Asn Leu Leu Gly Asn Pro Gln Ala Ser Ile Ala Gln Ile Ile Val Thr  
1 5 10 15

Val Val Leu Gly Leu Val Ile Gly Ala Ile Tyr Phe Gly Leu Lys  
20 25 30

<210> 198

<211> 9

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 198

Asn Asp Ser Thr Gly Ile Gln Asn Arg  
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<210> 199

<211> 26

<212> PRT

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<213> Artificial sequence

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<223> Computer generated synthetic peptide

<400> 202

Val Ser Ser Tyr Phe Leu Gly Lys  
1 5

<210> 203

<211> 9

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 203

Leu Leu Ser Asp Leu Leu Pro Met Arg  
1 5

<210> 204

<211> 18

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 204

Met Leu Pro Ser Ile Ile Phe Thr Cys Ile Val Tyr Phe Met Leu Gly  
1 5 10 15

Leu Lys

<210> 205

000017240400



&lt;211&gt; 2

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 205

Pro Lys

1

&lt;210&gt; 206

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 206

Ala	Asp	Ala	Phe	Phe	Val	Met	Met	Phe	Thr	Leu	Met	Met	Val	Ala	Tyr
1				5					10					15	

Ser	Ala	Ser	Ser	Met	Ala	Leu	Ala	Ile	Ala	Ala	Gly	Gln	Ser	Val	Val
			20					25					30		

Ser	Val	Ala	Thr	Leu	Leu	Met	Thr	Ile	Cys	Phe	Val	Phe	Met	Met	Ile
		35					40					45			

Phe	Ser	Gly	Leu	Leu	Val	Asn	Leu	Thr	Thr	Ile	Ala	Ser	Trp	Leu	Ser
	50					55					60				

Trp	Leu	Gln	Tyr	Phe	Ser	Ile	Pro	Arg
65					70			

&lt;210&gt; 207

&lt;211&gt; 41

&lt;212&gt; PRT

0000272104004

Asn His Val Ala Leu Ala Cys Met Ile Val Ile Phe Leu Thr Ile Ala  
1 5 10 15

Tyr Leu Lys

<210> 210

<211> 5

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 210

Leu Leu Phe Leu Lys  
1 5

<210> 211

<211> 1

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 211

Lys  
1

<210> 212

<211> 2

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

20250724T0800

&lt;400&gt; 212

Tyr Ser  
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&lt;210&gt; 213

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 213

Leu	Tyr	Met	Val	Val	Gly	Thr	Leu	Ala	Ala	Ile	Ile	His	Gly	Ala	Gly
1				5					10					15	

Leu	Pro	Leu	Met	Met	Leu	Val	Phe	Gly	Glu	Met	Thr	Asp	Ile	Phe	Ala
			20					25					30		

Asn	Ala	Gly	Asn	Leu	Glu	Asp	Leu	Met	Ser	Asn	Ile	Thr	Asn	Arg
	35						40					45		

&lt;210&gt; 214

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 214

Ser	Asp	Ile	Asn	Asp	Thr	Gly	Phe	Phe	Met	Asn	Leu	Glu	Glu	Asp	Met
1				5					10					15	

Thr Arg

&lt;210&gt; 215

000012120000



<223> Computer generated synthetic peptide

&lt;400&gt; 219

Leu Tyr Asp Pro Thr Glu Gly Met Val Ser Val Asp Gly Gln Asp Ile  
 1 5 10 15

Arg

&lt;210&gt; 220

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 220

Ile Leu Leu Leu Asp Glu Ala Thr Ser Ala Leu Asp Thr Glu Ser Glu  
 1 5 10 15

Ala Val Val Gln Val Ala Leu Asp Lys  
 20 25

&lt;210&gt; 221

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Computer generated synthetic peptide

&lt;400&gt; 221

Asn Ala Asp Val Ile Ala Gly Phe Asp Asp Gly Val Ile Val Glu Lys  
 1 5 10 15

&lt;210&gt; 222

&lt;211&gt; 21

&lt;212&gt; PRT

SECRET  
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Ala Asp Glu Ser Lys  
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<211> 14

<213> Artificial sequence

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$\langle 210 \rangle$     224

<211> 14

<212> PRT

<213> Artificial sequence

$\langle 220 \rangle$

$\langle 400 \rangle$  224

<210> 225



<213> Artificial sequence

<223> Computer generated synthetic peptide

<400> 225

Leu Asn Leu Thr Glu Trp Pro Tyr Phe Val Val Gly Val Phe Cys Ala  
1 5 10 15

Ile Ile Asn Gly Gly Leu Gln Pro Ala Phe Ala Ile Ile Phe Ser Lys  
20 25 30

<211> 28

<212> PRT

<213> Artificial sequence

 $\langle 220 \rangle$ 

<223> Computer generated synthetic peptide

 $\langle 400 \rangle$  22.6

Gln Asn Ser Asn Leu Phe Ser Leu Leu Phe Leu Ala Leu Gly Ile Ile  
1 5 10 15

Ser Phe Ile Thr Phe Phe Leu Gln Gly Phe Thr Lys  
20 25

<210> 227

<211> 45

<212> PRT.

<213> Artificial sequence

 $\langle 220 \rangle$ 

<223> Computer generated synthetic peptide

$\langle 210 \rangle$      $230$

<213> Artificial sequence

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 235

Ala Phe Thr Glu Gly Ala Val Leu Ser Phe His Asn Ile Cys Tyr Arg  
1 5 10 15

<210> 236

<211> 25

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 236

Glu Ile Leu Ser Asn Ile Asn Gly Ile Met Lys Pro Gly Leu Asn Ala  
1 5 10 15

Ile Leu Gly Pro Thr Gly Gly Gly Lys  
20 25

<210> 237

<211> 21

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 237

Asp Pro Ser Gly Leu Ser Gly Asp Val Leu Ile Asn Gly Ala Pro Arg  
1 5 10 15

Pro Ala Asn Phe Lys  
20

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<211> 19

<212> . PRT

<213> Artificial sequence

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<223> Computer generated synthetic peptide

<400> 238

Cys Asn Ser Gly Tyr Val Val Gln Asp Asp Val Val Met Gly Thr Leu  
1 5 10 15

Thr Val Arg

<210> 239

<211> 10

<212> PRT

<213> Artificial sequence

 $\langle 220 \rangle$ 

<223> Computer generated synthetic peptide

<400> 239

Glu Asn Leu Gln Phe Ser Ala Ala Leu Arg  
1 5 10

 $\langle 210 \rangle$  240

<211> 10

<212> PRT

<213> Artificial sequence

$\langle 220 \rangle$

<223> Computer generated synthetic peptide

<212> PRT

Leu Ala Glu Ile Tyr Val Asn Ser Ser Phe Tyr Lys  
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<210> 246

<211> 13

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 246

Glu Ile Ser Tyr Thr Thr Ser Phe Cys His Gln Leu Arg  
1 5 10

<210> 247

<211> 31

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 247

Asn Leu Leu Gly Asn Pro Gln Ala Ser Ile Ala Gln Ile Ile Val Thr  
1 5 10 15

Val Val Leu Gly Leu Val Ile Gly Ala Ile Tyr Phe Gly Leu Lys  
20 25 30

<210> 248

<211> 26

<212> PRT

<213> Artificial sequence

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<223> Computer generated synthetic peptide

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Ser Gly Leu Leu Val Asn Leu Thr Thr Ile Ala Ser Trp Leu Ser Trp  
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Leu Gln Tyr Phe Ser Ile Pro Arg  
65 70

<210> 251

<211> 41

<212> PRT

<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 251

Tyr Gly Phe Thr Ala Leu Gln His Asn Glu Phe Leu Gly Gln Asn Phe  
1 5 10 15

Cys Pro Gly Leu Asn Ala Thr Gly Asn Asn Pro Cys Asn Tyr Ala Thr  
20 25 30

Cys Thr Gly Glu Glu Tyr Leu Val Lys  
35 40

<210> 252

<211> 12

<212> PRT

<213> Artificial sequence

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<223> Computer generated synthetic peptide

<400> 252

Gln Gly Ile Asp Leu Ser Pro Trp Gly Leu Trp Lys  
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<210> 253

<211> 19

<212> PRT

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<213> Artificial sequence

<220>

<223> Computer generated synthetic peptide

<400> 253

Asn His Val Ala Leu Ala Cys Met Ile Val Ile Phe Leu Thr Ile Ala  
1 5 10 15

Tyr Leu Lys

1. Mr. J. H. Smith  
 2. Mr. J. H. Smith  
 3. Mr. J. H. Smith  
 4. Mr. J. H. Smith  
 5. Mr. J. H. Smith  
 6. Mr. J. H. Smith  
 7. Mr. J. H. Smith  
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